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Approved For Release 2003/08/05 : CIA-RDP78B05171A000800030020-7

NPIC/TSSG/PPS-033-70
8 April 1970

MEMORANDUM FOR: Chief, Technical Services & Support Group, NPIC

SUBJECT: Projects & Programs Staff Monthly Report - March 1970

A. During March, the Projects & Programs Staff conducted staff functions for TSSG (including, (1) administrative, (2) daily representation to the Production Management Board, (3) frequent working level liaison contacts with PPBS on budget matters, and (4) with PSG on production matters) and also carried out the following additional actions.

1. Prepared for, conducted and reported on the [] meeting for March; conducted all aspects of the [] visit to U.S. Geological Survey at Reston. Began preparations for [] visit to SPPF, Westover AFB in April.

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2. Studied and reported on the FY-71 T/O requirements for TSSG.

3. Continued efforts on the survey to place an LDX facility at []

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4. Provided assistance to the Executive Officer, TSSG and to SSD for input to the future Center facilities requirements.

5. Concluded Panel B recommendations for GS-11's and forwarded Composite Evaluation Sheet with back-up data to the Center's Panel.

B. During April, the following significant actions are anticipated.

1. Prepare for and conduct [] meeting for April. Make final preparations for trip to SPPF, Westover AFB.

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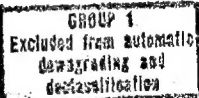
2. Panel B recommendations for GS-10's will be completed.

3. Complete the Third Quarter Fiscal Year 1970 Budget exercise for TSSG.

DECLASS REVIEW by NIMA/DOD

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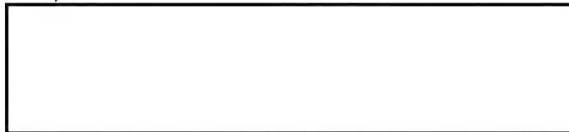
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SUBJECT: Projects & Programs Staff Monthly Report - March 1970

4. Commence the Operating Budget Call exercise for Fiscal Year 1971.

5. Complete two special staff studies for Chief, TSSG,



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Chief, Projects & Programs Staff, TSSG, NPIC

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9 April 1970

MEMORANDUM FOR: Chief, Technical Services and Support Group

SUBJECT : Support Services Division Monthly Report -
March 1970

LOGISTICS -

A review in depth of the Logistics Branch by a representative of the Center [redacted] and the Office of Logistics [redacted] was begun on Monday 30 March. This review which will encompass all aspects of the Branch functions including procedures is to study the adequacy of the personnel staffing pattern in conjunction with the Center's five year plan. On their initial visit there were briefings by [redacted] Executive Director, [redacted] Executive Officer, TSSG, and by [redacted] Chief, Logistics Branch. The second day, they interviewed [redacted] Chief, Building Supply Section and reviewed all activities under his responsibility as well as those responsibilities under [redacted] [redacted] Chief, Building Services Section.

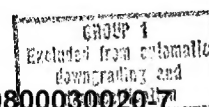
TRAINING -

1. During the week 2 to 6 March, eighteen NPIC personnel attended a full time radar imagery training course conducted by [redacted] in Alexandria, Virginia. The course is the beginning of the Advanced Strategic Radar (SLAR) Training Program contracted by NPIC with [redacted]

2. The contract with [redacted] was granted approval by the Director of NPIC to continue the Infrared Training program through FY '70 and FY '71. The objective has been to institute an advanced infrared interpreter training program for a select cadre of 15 NPIC interpreters, wherein emphasis was placed upon student understanding of state-of-art technology and products (e.g. imagery and analog data).

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SUBJECT: Support Services Division Monthly Report - March 1970

SECURITY -

25X1 1. Security invited [] D.C. Fire Department, to visit and conduct fire inspection of the Building. He also reviewed and approved the fire emergency instructions.

25X1 25X1 2. Chief, Security Branch met with Headquarters Security representatives who made a physical security survey of [] emphasizing protection against bombing. NPIC Security also reviewed [] bomb threat procedures and Chief, NPIC Security Branch gave a briefing at an area security officers meeting concerning this subject. A new guard post was established at the [] pedestrian gate in accordance with recommendations made by the Headquarters Security survey team.

25X1 3. There were no reports of personnel harassment or vehicle incidents reported during the month of March 1970.

[]
Chief, Support Services Division
TSSG

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TSSG/ESD-18/70
3 April 1970

MEMORANDUM FOR: Chief, Technical Services & Support Group, NPIC

THROUGH : Chief, Projects & Programs Staff, TSSG
Executive Officer, TSSG

SUBJECT : ESD Activity Report -- March 1970

1. Noteworthy Events -- March 1970

a. Project Activity:

(1) Preventive and Emergency Maintenance - The Equipment Performance Branch (EPB) received 77 requests for emergency maintenance and serviced 170 instruments under the preventive maintenance program.

(2) Equipment Design, Modification and Fabrication - The EPB completed fourteen tasks in support of Center components.

(3) Acceptance Tests - Four production models from the [] contract for Dual Viewing Microstereoscopes were tested. One was found unacceptable due to color in the optics of one viewing side. The Contracting Officer is taking action to have this problem corrected.

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(4) "Green" Light Tables - Two [] MIM-47 Light Tables have developed a green discoloration in the cooling oil. Several additional tables appear to have the same problem to a lesser degree. Tests are being conducted by TEB/ESD and ATB/RED to determine the cause of the discoloration.

25X1

(5) Light Table Oil Leaks - As of 31 March 1970, ninety-two [] MIM-47 and nineteen MIM-45 Light Tables have been modified by [] to correct the oil leakage problem.

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(6) Digitized Measuring Light Table - Test and evaluation of this Table, now functioning properly, continued.

(7) Twin Stage Comparator - The Interim Test Report for this On-Line P.I. Comparator was issued. The Comparator is in TEB awaiting the manufacturer's proposal for modification.

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(8) FMA 1540 Light Table - Acceptance testing was completed in TEB and operational evaluations started in IEG. The TEB test report is in preparation.

25X1 (9) [] 1540 Light Table - Acceptance testing was completed in TEB and operational evaluation started in IEG. The TEB test report is in preparation.

(10) Advanced Stereo-Rhomboid Mod. II - Acceptance testing was completed in TEB and the Rhomboid was delivered to IEG for operational evaluation. The test report is in preparation.

(11) Optical Testing Study - Development Objectives were prepared for a Study to provide information on methods and equipment to be used in the evaluation of optical systems.

b. Personnel Activity:

25X1 (1) [] student co-op, TEB, completed his current tour on 20 March.

25X1 (2) [] student co-op, TEB, started his second tour on 30 March.

25X1 (3) [] student co-op, EPB, started his initial tour on 30 March.

25X1 (4) [] TEB, completed the Offutt P.I. Course 2-6 March.

2. Anticipated Events -- April 1970

a. Project Activity:

25X1 (1) Distribution of Memorandum Test Reports for both the [] and [] 1540 Light Tables.

(2) Distribution of Memorandum Test Report for the Mod. II Advanced Rhomboids.

(3) Initiation of test and evaluation of the Wide Field Filar Eyepiece.

b. Personnel Activity -- None

[]
Chief
Engineering Support Division, TSSG

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MEMORANDUM FOR: Chief, Projects & Programs Staff, TSSG/NPIC

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ATTENTION:

SUBJECT: APSD Activity Report for March 1970

1. The following items of significant interest occurred in APSD during March 1970:

a. Exploitation Support

(1) Photo-interpretation

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(a) Special reproductions of several [redacted] passes using a new high contrast film (SO-369) were made for the interpreters, who reported improved interpretability. A briefing was presented to the IEG on the enhancement potentials of SO-369 and 6451 films. An outline of a study designed to determine a technique to automatically dictate the use of these films was presented to the NPIC PMB.

(b) Tests are being conducted to determine if special reproductions of the red and green layers of SO-242 color film will improve interpretability.

25X1

(c) The "revised" NPIC Photographic Reproduction Specifications were disseminated - [redacted]

(d) TORID, a histogram model to provide density distributions from various films, has been documented.

(e) A briefing was presented to IEG on the functions of APSD.

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SUBJECT: APSD Activity Report for March 1970

(2) Photogrammetric Analysis

(a) A Chi square statistical model has been prepared to test hypothesis of the independence between observed and hypothetical frequencies.

(b) An investigation of the X, Y image pointing errors on the point transfer device reveals that the best (2σ) estimate of operating pointing error on [] is 5 microns.

25X1

(c) POREG, a least squares method of estimating the coefficients of a polynomial has been documented.

(3) Operational Activities

(a) APSD arranged for NRO to brief IEG on the KH-4 and [] targeting procedures.

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(b) A close continued surveillance by APSD of operational mission activity resulted in a saving of time and money by eliminating the film duplication of [] which was 90-95% cloud covered.

25X1

(c) Support was provided NRO, DDS&T, and TOPOCOM on a variety of operational problems.

b. Collection Systems Support

(1) Systems/Films under development

(a) A simulated [] weather/quality analysis using [] material was conducted for the Satellite Operations Center.

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(b) [] an NPIC technical advisor to the Disaster Committee, furnished extensive support in satisfying committee requirements.

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SUBJECT: APSD Activity Report for March 1970

(c) A series of [] reproductions made to show resolutions from 1.0 to 30.0 feet were furnished to DIA and the Executive Director, NPIC.

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(2) Operational Systems

(a) The initial phase handling of [] was accomplished.

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(b) One [] aircraft mission was evaluated.

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(c) APSD representatives participated in the PET meeting for []

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(d) Work on satellite Performance Evaluation Reports (PERs) consisted of KH-4 [] (published), [] (published), [] (90% complete), [] (5% complete) and [] (reproduction), and [] (70% complete).

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(e) Reproduction and publication support was provided NRO and DDS&T.

(f) A briefing was presented to the [] Committee on the data flow required for satellite mission breakdowns.

25X1

(g) A briefing was presented to [] on APSD Tiger Team functions.

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2. The following significant action items are anticipated for the month of April:

a. Briefing to DDS&T/OSI and the Executive Director, NPIC on photographic processes.

b. Initial phase handling of []

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SUBJECT: APSD Activity Report for March 1970

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c. Distribution of the NPIC technical evaluation report on color prepared by APSD - [] and [] (supplement).

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d. Attendance at the following meetings:

- (1) PET meeting at NPIC on []
- (2) SENIOR PEG meeting at NPIC.
- (3) Tour of [] facility at P&E.

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[]
Chief, Applied Photo Science division,
TSSG/NPIC

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NPIC/TSSG/RED-107-70
3 April 1970

MEMORANDUM FOR: Chief, Technical Services & Support Group, NPIC

ATTENTION : [] TSSG/PPS

SUBJECT : RED Monthly Report on Significant Events (March 1970)

A. Significant Items of Interest for March 1970.

1. [] Presentation. [] presented a talk, film and demonstration of DYLUX material to NPIC personnel. Two of their latest materials, as well as some full color possibilities, were presented. The loan of a DYLUX processor from [] is being arranged so that NPIC PI's can give an Operational Evaluation of the various materials marketed by []
2. Calibration Device. The Calibration Device for the High Precision Stereocomparator has been presented to NPIC personnel. [] was briefed on 26 March. The Staff Study has been forwarded.
3. Computer Core Memory. The Staff Study for the Additional Computer Core Memory for the High Precision Stereocomparator has also been forwarded to the DDI for approval.
4. High Precision Stereocomparator Program. [] Project Manager is at [] and expects to start the acceptance tests on the optics on 31 March 1970. If all goes well, the tests will be completed by 17 April, and the optical system shipped to [] on 28 April 1970.
5. Basic Research in Precise Measurement. Proposals have been evaluated; the briefings and paper work are being prepared.
6. PI Scan & Search Station, Phase II. Proposals and cost breakdowns to fabricate the PI Scan & Search Station have been received. The proposal information has been presented to the coordinating committee.
7. Step & Repeat Contract Printer. A proposal has been received for the preliminary design of the Step and Repeat Contract Printer. This is currently being coordinated with PSG.

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SUBJECT: RED Monthly Report on Significant Events (March 1970)

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8. 1540 Light Table. The prototype models of the 1540 Light Tables have been delivered by [] and []. The tables are being evaluated in TSSG/ESD. Technical specifications are being prepared for the follow-on production models. 25X1
9. Advanced Stereo Rhomboids II. The Advanced Stereo Rhomboids II have been delivered by []. This item is being tested and evaluated in TSSG/ESD. Technical specifications have been prepared and turned over to TSSG/SC&PS for the production models. 25X1
10. 940 Light Table. A Project Approval Request for a vibration analysis of the 940 Light Tables has been prepared and forwarded to Chief, TSSG.
11. Low Power Objectives. A proposal to determine the feasibility of providing low power objectives for the Advanced Stereo Rhomboids II has been evaluated. The approval memo has been forwarded to Chief, TSSG.
12. Retrofit Film Transport Kit. On March 26, the Retrofit Film Transport Kit was accepted at []. The kit (mounted on a GFE MIM #4 Light Table) will be delivered to NPIC in early April. 25X1
13. Wide Field Filar Eyepiece. The Wide Field Filar Eyepiece for the High Power Stereoviewer was completed by [] and was delivered to NPIC on 30 March 1970. 25X1
14. Improved Lamp Performance Study. The contract for the Improved Lamp Performance Study with [] was signed on 6 March 1970. 25X1
15. Eyepiece for Zoom 240. A proposal for a Wide Field Filar Eyepiece Set for the Zoom 240 was received from [] and evaluated. 25X1
16. 10" x 10" Stage Stereocomparator. A revised proposal for a 10" x 10" Stage Stereocomparator was received from the [] and evaluated. 25X1
17. Measurements of Threshold Targets. On March 20, discussions were held with [] of [] and representatives from [] regarding the study sponsored by [] on Measurements of Threshold Targets. The study will be beneficial to NPIC; NPIC will give limited support to the task. 25X1
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SUBJECT: RED Monthly Report on Significant Events (March 1970)

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18. Image Quality. On 12 March a conference was held between Drs. [redacted] and ATB personnel regarding Image Quality Tasks on which the [redacted] may be able to assist NPIC. [redacted] is coordinating efforts in this area. 25X1
25X1
19. OMS Assistance. On the 16th of March, [redacted] and [redacted] of OMS/PPS met with [redacted] regarding OMS assistance to ATB in several areas. 25X1
25X1
20. Digital Image Manipulation System. On 24 March, [redacted] decided from several alternatives to install the Digital Image Manipulation (DIM) Input/Output System in Room 4N807. The system will be located with a 11 X 11 foot portable laminar flow clean room. The completion date is presently set at 30 May to accommodate the receipt of the equipment from [redacted] 25X1
- 25X1
21. [redacted] 940 Light Table. [redacted] have been performing spectrographic and chromatographic analyses of cooling oil in [redacted] 940 Light Tables. Preliminary results indicate the oil may be changing color due to UV and thermal breakdown problems. Continuing tests in conjunction with ESD are aimed at isolating the effects causing such color changes. 25X1
25X1
22. UV Emission. ATB has received the final results of a test performed by the National Bureau of Standards on UV emission from a [redacted] 940 Light Table. These indicate no significant emissions below 3650 Å and approximately 1 micro-watt 1 cm² at that value. Further data can be obtained from ATB memo 072/70 dated 26 March. 25X1
23. Contact Lens Acceptance Survey. [redacted] has analyzed the results of a Contact Lens Acceptance Survey conducted in IEG thru ATB at the request of [redacted] Results are tabulated in ATB-064/70 of 26 March. 25X1
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- 25X1
24. DDS&T Support. [redacted] is continuing on a full-time one-month project special support to DDS&T in the area of Image Manipulation. 25X1
25. Behavioral Sciences. On 25 March, [redacted] visited [redacted] Chief of the Technical Analysis Division, National Bureau of Standards. [redacted] division contains several elements of interest to ATB, including a Behavioral Sciences Group headed by [redacted] 25X1
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SUBJECT: RED Monthly Report on Significant Events (March 1970)

- 25X1 [] The T. A. Division also possesses resources in
statistical analysis and operation research which may be applied
25X1 to our problems. Follow-up actions are planned with meetings
between [] and the [] personnel.) RD
26. Image Comparison Microstereoscope. Final alignment of all four
optical paths has started; however, concurrent check of the
anamorphic subassemblies has just revealed the presence of
astigmatism in 3 of the 4 paths. [] is checking
the anamorphic prisms against the specs and refabrication may
be necessary. This would delay delivery a number of weeks. The
Project Officer will visit [] on 13 April, with our consultant,
[] and review the problem. 25X1
27. Automatic Stereo Scanner. On 26 March 1970, a briefing was
given to [] recommending an Engineering Audit by []
in lieu of continuing the development. It was decided to
pursue both the Engineering Audit and a [] test and simula-
tion on the High Precision Stereo Comparator, as preludes to
completion of the Automatic Stereo Scanner. Meetings were
held at NPIC with [] in preparation for
this test proposal (expected in early May 1970). Arrangements
were made to discuss with [] their proposal on 7 April 1970
at NPIC. We are working towards starting both efforts by
1 June 1970. 25X1
28. Stereogram Printer Optical Development. [] is continuing two
optical approaches--one approach with prismatic anamorphosers
and another utilizing cylindrical elements. It is anticipated
that a selection can be made in April. Relaxation of magnifi-
cation and anamorphic specs was considered, but will be reserved
as last resorts. A draft of the revised statement of work was
reviewed, but has not yet been received in final form. 25X1
29. Briefings.
[] an RED consultant from the National Bureau of
Standards, presented a briefing to interested NPIC personnel
on 10 March on Color Perception in the Center Auditorium.
[] briefed ten R&D personnel from [] on Image
Manipulation on 18 March. 25X1
On 19 March, [] personnel briefed [] and Group
Chiefs on the Mid-70's PI Workstation. 25X1

SUBJECT: RED Monthly Report on Significant Events (March 1970)

On 9 March, [] presented a briefing to [] on IBM proposal for study of Electronic Image Displays.

On 24 March, [] presented a briefing on the Adage proposal for Interactive Display System. Following this, on 23-27 March, [] showed a movie of RED's Adage demonstration to several NPIC personnel including []. On 27 March, [] showed this same movie of RED's Adage demonstration to DIA personnel in [].

On March 31, [] presented a briefing to [], TSSG, and [] PPBS, on the Viewing Systems Study.

30. Training.

[] attended the Offutt PI Course from 2-6 March 1970.

[]
Deputy Chief, Research & Engineering Division, NPIC

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30 March 1970

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MEMORANDUM FOR: Chief, Research & Engineering Division, TSSG/NPIC

SUBJECT : Reconnaissance Systems Branch Monthly Report
March 1970

Significant Events for the Month of March 1970:

1. [] attended several Color Task Force meetings which were held for the purposes of organizing information and data, identifying problems, initiating plans and actions, and documenting pertinent matters. In accordance with [] directive set out in NPIC Instruction Number 51-3, he attended several meetings of NPIC and community representatives with the purpose of coordinating color matters.

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2. [] prepared preliminary negotiations and tasking requirements for [] to provide the calibration of cameras for DD/P.

3. [] is preparing exploitation system requirements and specs for oncoming SLR systems to include the contingencies of near-real-time transmission and storage in the event that NPIC may be required to receive and process SLR imagery in any of several possible forms (taped signals, doppler phase history, etc.). These matters need to be addressed in the advanced planning phase and in determining what the responsibilities and task of exploitation facilities will be.

4. [] briefed a number of groups on the [] improvement program, including: IAS, IEG, APSD, RED, and PSG.

5. During the week of 8 March, [] attended extensive meetings on the west coast concerning the [] program. The sessions dealt with target indexing, software interfaces, stellar index requirements, camera alignment and calibration requirements, calibration reporting procedures, software interfaces between the taped telemetry data and the technical analysis group at STC, flight plans for horizon sensors and star trackers, and a number of items concerning the ephemeris.

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TCS-6627/70

SUBJECT: Reconnaissance Systems Branch Monthly Report
March 1970

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6. The first can of [] test material was received and Mr. [] has prepared a plan for the test and calibration of the formats and other exploitation factors.

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7. Ten rolls of [] dupe stock was received for NPIC use in developing test material and test imagery for instrumentation and materials evaluations.

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8. [] has arranged for a special meeting of the MC&G Working Group to be held the first week in April to discuss the [] stellar/terrain ephemeris requirements. The completed ephemeris content and format will be presented to the subcommittee for approval.

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[]
Chief, Reconnaissance Systems Branch,
RED/TSSG/NPIC

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